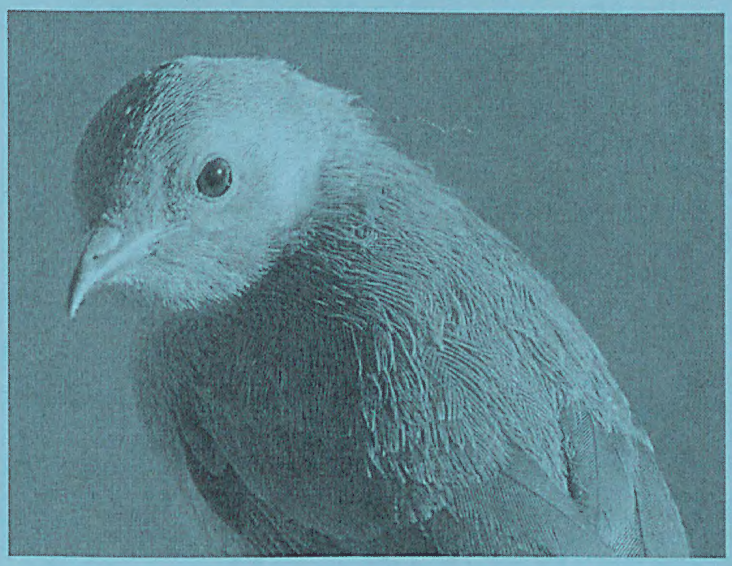
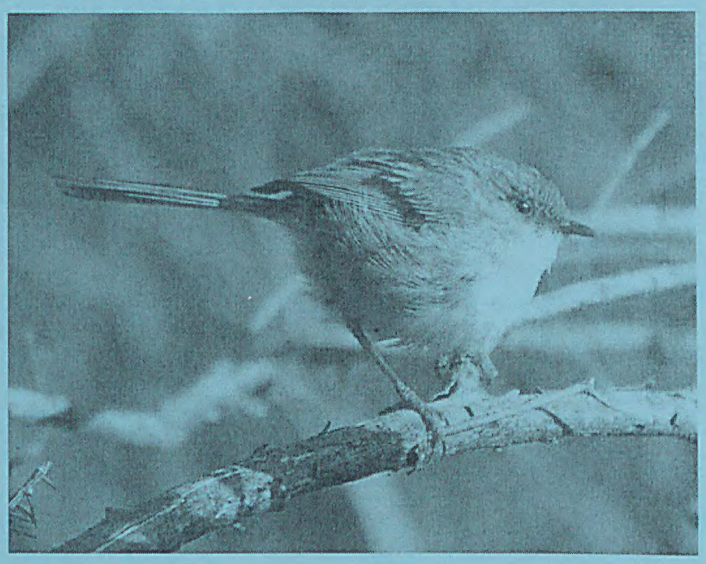
WHIRRAKEE

December 2014 Vol. 35 No. 11

Registered by Australia Post. Publication No. VBH4462





MONTHLY NEWSLETTER OF THE BENDIGO FIELD NATURALISTS CLUB

Bendigo Field Naturalists Club Inc.
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ISSN 0812-423X

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Membership of the Bendigo Field Naturalists Club is open to all those interested in Natural History. The subscription rates are: Single $40; Family $50; Concession: Single $35; Family $40. *Whirrakee* subscription only is $40.

General meetings are held on the second Wednesday of each month. The venue for General meetings is the Golden Square Senior Citizens Building, Old High Street, Golden Square. The meeting starts with members sharing their recent natural history observations. The invited speaker starts at 8:00pm and meetings conclude with supper. The Annual Meeting is held in September.

Committee meetings are held on the third Wednesday of each month at 5:30pm. Members of the Committee are the Office Bearer listed above and the following members: Alistair White, Kerrie Norris, John Lindner, Diana Collier, Jan Orr, Devi Shanty, Simon Hay

Excursions are conducted regularly and are advertised on the diary page of the *Whirrakee*. The assembly point for excursions is the Golden Square Senior Citizens Building, unless otherwise specified. Several interclub field naturalist campouts are held every year.

The Bendigo Field Naturalists Club is actively involved in local conservation issues. An **indigenous garden** has been established around the Golden Square Senior Citizens Building. Working bees are advertised on the *Whirrakee* diary page.

Bird Observing: Club members conduct regular bird surveys. Please contact Anne Bridley 5442 6188 or Glenise Moors 5439 6254 for details. Special bird observations should be reported to Anne Bridley 5442 6188. To propose bird observing excursions please contact Kerrie Norris 5447 8017.

WHIRRAKEE

Monthly Newsletter of the Bendigo Field Naturalist Club
Vol. 35, No. 11, December 2014
Whirrakee takes its name from the Whirrakee Wattle (*Acacia williamsonii*), which is virtually endemic to the Bendigo region

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Authors are responsible for the accuracy of the information they use and also for any opinions expressed in their articles. Contributions should be posted or e-mailed to the editor at least two days prior to the last Wednesday of the month. They will be included as soon as possible after they are received, although space restrictions occasionally require shortening of articles or holding them over till the following edition of *Whirrakee*.
Articles in *Whirrakee* may be reproduced, but permission should be obtained from the Bendigo Field Naturalists Club, and acknowledgment should be given to the author and the Club. Some back issues are still available on request.

Editor's Note
Now that it is nearly summer, many of our wildflowers have stopped flowering; although we might get a little sad at the loss of colour in the bush, we know the flowers will be with us again, next year. Or will they? Peter Ellis has written a long essay on the disappearing wildflowers from our district, and this month we have the first instalment.
This is the last edition for the year and special thanks go to all contributors of photos, stories and excursion reports. You have made my job a breeze over the last 12 months, and I am very thankful. I wish everyone a wonderful summer break and don't forget to record and report any interesting observations for our February Whirrakee, *and… about the Club's Yearly Hall cleaning event and the delicious Christmas break-up (see page11).*

Front page photographer: Michael Angove
I hope I am not squandering my stock of bird photos from Michael – only being generous with them (as he has been generously sharing them with me).
The top image is of a Black-fronted dotterel that was hiding from the photographer by blending in with the surroundings, alternatively it might have tried to draw the photographers attention away from a nest? The lower left photo is…can you guess this in black and white? If you can't, the colour photo is on page 5. The lower right photo is of a female superb fairy wren.

Short Notices

Membership fees were due in September
Last call – If you have not paid up, please do so now, otherwise you will miss out on the next *Whirrakee*

Our BFNC Garden **by Jan Orr**

Our garden was started over 10 years ago when the club accepted the management of the Golden Square Senior Citizens Hall. The site looked the same as the open area on the south side of the hall. It was a mown weed-scape that was costly for the City Council to maintain.

Our aim for the garden was to feature local indigenous plants and to re-create an island of Bendigo bush in the centre of the city. Many of the plants, especially the trees and larger shrubs, that were planted back then have grown to create a pleasant walk from the Fire Station to the main entrance of the hall.

However anyone who has visited the hall recently will be aware the weeds are still with us and are thriving.

"It's Time"(to steal the famous slogan that is again in the news) to reassess our garden and how the club can best maintain it!

It's Time to look at the garden's size. Can our club stay on top of the weeds in this large area of garden? Cleavers, Vetch, Mallow, Geranium, Cape Weed and last year Oxalis has managed to join its weedy mates. Rye Grass, Rats Tail and Wild Oats are but 3 of the grasses that call our garden home.

It's Time to rekindle the enthusiasm that inspired the BFNC members to create this garden by:

- accepting outside help to manage the weeds in the late winter and spring.
- looking at the garden's structure to improve its appearance and ease of maintenance. Such as: Making the garden at the Hall's entrance more 'horticultural'

Leaving the treed section from the fire station to the northern end of the hall as 'bush'

Making paths through this section to formalize the pedestrian short-cuts through the garden.

- working more closely with the City of Greater Bendigo Parks crew to share the load.
- developing a more flexible number of working-bee days that can enable more people to become involved. To do this the garden organizers need the names and contact details of garden volunteers to inform them of planned working-bee activities and dates and times.
- ensuring working-bees are no longer than two hours in durationare, are social occasions, include AM or PM cuppa break and are appropriate to the age and capabilities of BFNC members.

These suggestions and are for us to discuss, but is clear to me, when faced with a wall of weeds like we had this spring, even the most committed volunteer gardener would give up.

Working with Council, Anthony Sheean, a City of Greater Bendigo Officer and long time BFNC member, along with a representative from the CGB Parks staff, will **arrange an on-site meeting in January with BFNC members**, to evaluate the gardens and to begin to draw up a management plan for the gardens.

It must be remembered that the gardens are a community garden on council land, therefore it is appropriate that we work with the council to achieve the results we desire.

Can You Help? It would greatly assist us at this meeting if the BFNC had a clear idea of how many members can give their time to the gardens. If you are interested in local indigenous plants and enjoy the 'esprit de corps' of mucking in with a cheerful group, please contact Jan Orr. The easiest way to give us your helpful details is to complete the insert enclosed in this *Whirrakee*, and return it to Jan). This will enable us to organize the working-bees. (email: r.orr@westnet.com.au, phone: 5443 5668, Mail: 2 Cockerell Court, Bendigo 3550).

Annual Hall Spring Cleaning
On **Saturday December 13**, at 9am
See page 11 for details

Brilliant Spring colours from the Grampians (Photographs from Sarah Floyd)
Isn't it interesting that so many orchid flowers have this maroon-beige colour combination?

Red Beaks
Pyrochis (Lyperanthus?) nigricans R.Br.

Flying Duck Orchid
Caleana major

Dotted Sun Orchid
Thelymitra (ixioides?)

Plain lip Spider Orchid
Arachnorchis (Caladenia) clavigera

The old tip site again (North Bendigo) (Photos by Michael Angove, November/14)

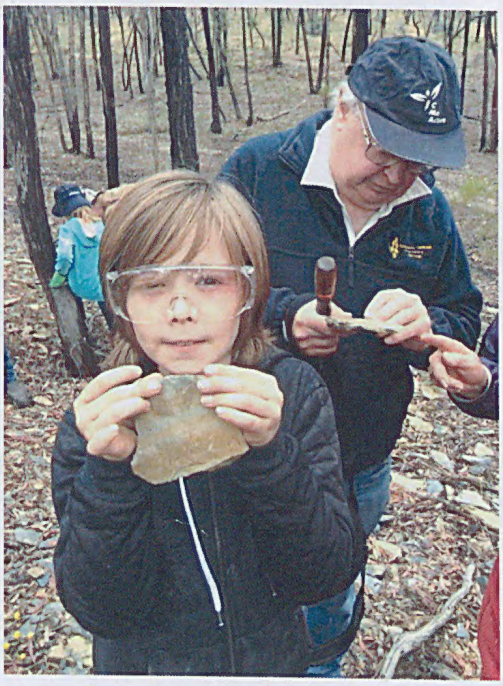
Left to right, top to bottom: Red-browed firetail, Superb fairy wren, Red-rumped Parrot, Black-shouldered Kite, White-plumed honeyeater (juvenile). The latter is the bird on the front cover.

left: Silvereye – at an interesting angle…What is he/she thinking?
(photo by Michael Angove)

Below right: What image does this conjure up in you? The tiny stick does not even bend from the weight of the Spotted Pardalote (Michael Angove).

Below left: Karen Thomas took this photo on her dam in early November… she has not had a Hard Head visit before… this bird is truly on the ball.

Searching for graptolites with Phil Dyson. These three photos were taken at the last Family Nature Club excursion for the year.
The hunt was obviously successful (photos by Joy Clusker)



Local bushland… now and then

Two sides of a track – taken a couple of days after burn in One Tree National Park
Below: a survivor - it's a mystery as to how! (Photographer: Karen Thomas)

Prickly Waxflower, *Philotheca pungens*, Piccaninny Rd, Mandurang (Photographer: Peter Ellis, see Peter's article on page 9)

Right:
Slender Velvet Bush,
Lasiopetalum bauera

Photos by Peter Ellis,
see page 10 of Peter's article
for these three photos

Left: Maroon Spider Orchid
Sedgwick Race Oct.1971

Right: The Springs, Mandurang
circa Sept 1965

Response of woodland birds to the millennium drought

November General Meeting – Speaker: Prof Andrew Bennett (by Sabine Wilkens)

Andrew Bennett, who currently works at Deakin University and the Arthur Rylah Institute, has much interest and expertise in the fauna of Box and Ironbark country in central and northern Victoria. The images he showed to introduce the study represent iconic landscape views that are serene and wonderful to look at, but which have undergone huge changes over the past 100 years. Agriculture and urban developments are two of the big agents of change, but changed fire regimes and weed invasions follow not far behind. It is a sobering thought, that an old Box tree (photographed on Andrew's family property) has seen all those changes go past. There are not many of those silent witnesses left.

The question Andrew and his team were asking for this project was: How do woodland birds respond to such landscape changes? and what are important attributes of this rural landscape for birds? In the last decades, many ecologists have turned to the scale of landscapes to answer their questions, as it is the whole landscape that contributes to a species' need, and it is landscapes that are managed by humans and at the landscape level, past and present disturbances have been experienced.

The study Andrew presented began in 2002, with the selection of 24 landscapes in 500 mm rainfall zone of Northern Victoria. Each landscape measured 10 x 10 km, and in each one, ten 2ha sites were surveyed four times over a period of twelve months. Of the ten sites in each landscape, three included riparian vegetation, whereas the other seven didn't. What a massive effort!

In the initial 2002 survey, 156 species of land birds were observed, with 80 of them classified as wood-land-dependent birds; so the next question was, what properties (attributes) of the landscape influence species richness? Perhaps not surprisingly, it turned out that tree cover was the most influential characteristic. Increasing tree cover, from 0 to 10% in the surveyed landscapes, resulted in an increased number of bird species. Once 10% cover was reached, the number of species remained fairly constant. At the time when the results were released, this 10% threshold caused a lot of interest amongst ecologists.

Where are these trees that constitute 0 – 10% cover in the degraded agricultural landscapes of Victoria? They are usually found lining creek beds, so this finding has thrown a new light on the importance of riparian vegetation. At these sites, there were usually more woodland birds and also some distinctive species that did not occur in the non-riparian sites.

The next time the survey was undertaken was during the 'millennium' drought in 2006/2007. The results showed that the number of birds (including woodland-dependent birds) was much reduced - in fact many species had crashed. Two thirds of all the birds showed a marked decline during this survey. Reasons for the decline would have included food shortages and lack of suitable cover for shelter, breeding and refuges.

Andrew was successful in obtaining funding for a third survey in 2010 to answer the questions to what extent the avifauna had recovered from this drought. The result was mixed. Many species had shown a recovery of sorts but few had reached the population sizes from the pre-drought survey. Sadly, 15% of species had further declined in numbers, and a select few species actually showed a population increase (e.g. Painted Button Quail and Yellow-faced Honeyeater).

Some examples of the change in bird numbers are shown below: (GST=Grey Shrike Thrush, WBB = White-Browed Babbler, MB = mistletoebird, SK = Sacred Kingfisher

	2002/3	2006/7	2010/11
GST	23	23	23
WBB	14	10	7
MB	13	6	2
SK	15	8	14

Finally, Andrew's team looked for determinants of **resistance** (resistance to population crashes in the face of drought) and **resilience** (ability to bounce back, once conditions return to normal). They found again, that riparian vegetation patches are the key element. The more riparian vegetation existed, the greater was the resistance of the species to collapse. However (and somewhat counter-intuitively), the researchers also found that in landscapes with more riparian vegetation, the bird species were proportionately less resilient This may be so, because wooded landscapes suffered less species decline in the first place during this drought. It needs thinking about... However a third measure of species richness, **stability**, increased markedly with the extent of tree cover (similar to resistance).

While the overall result of this massive study was somewhat bleak, especially for woodland birds, it also showed that we as individuals can actually do useful work to improve the lot for these birds. Landowners do not have to wait for government initiatives in conserving important habitats for birds, but every landowner can practice conservations of their own streamside vegetation and habitat and we can thus moderate the effects of droughts, and no doubt, climate change effects in general.

So what are the implications of these results for the recovery of Northern Victorian bird populations from drought? Some recovery has occurred in the few years since the drought has broken, but the big question is, can a full recovery actually be achieved for all species, and if so, is there enough time before the next drought comes along? On the night of this presentation, we were all hoping that Andrew will find additional funding to conduct another survey in the next few years.

Where have all the flowers gone! Part 1
by Peter Ellis

This is not necessarily about rare species, as I consider magnificent shows of common wildflowers just as valuable. Although we've had two or three good seasons overall, following a devastating drought of 10 years, as well as very dry autumns some years leading into the drought, much of our local flora has diminished in show compared to the glorious displays some of us might remember in earlier decades. To cap it off, when much of our bushland has been stressed as a result, controlled burns by DEPI have been just as devastating. Whilst a few fire dependant species will generate vigorously as a result, much of the fire resistant understory has been destroyed and instead, grasses and weeds including African cape weed are encouraged by this 'control'. The grasses are more a fire hazard than the original vegetation.

Rod Orr asked me recently if I could show him the locality of the Prickly Waxflower at Mandurang. Suddenly I became concerned I might be one of the few remaining that might know of its existence and what would be its future if a controlled burn was to occur there? Redvers Eddy first gave me directions to find the Prickly Waxflower about 1964, and at that time it was classified as *Phebalium pungens*, some decades later being reclassified as *Eriostemon pungens* and now *Philotheca*. It used to have a small low fence around the plot, so could be found. I last saw it and photographed it in November 1972. I only remember one or two club excursions to see it; November is when it flowers, in contrast to the Inglewood form, which is coming into flower now (i.e. late September). I've been out several times over the years and couldn't find it, but this time when I took Rod out, I luckily walked straight to it. There are only 10 to 12 plants. When in flower it is a straight white, including the buds, whereas the Inglewood form has pinkish buds. See photo below and page 7 for the colour version.

Prickly Waxflower, *Philotheca pungens* Piccaninny Rd Mandurang (by Peter Ellis)

My mind turned to other plants in the area, the once locally famous Cryptandra Corner (*C. armara*) in the Wellsford Forest where we had regular excursions over the years; I took Matt out there, couldn't find any. Matt went back and searched closer with an eagle eye, tiny bases exist, eaten to the ground by Wallabies or Roos (see old photos below).

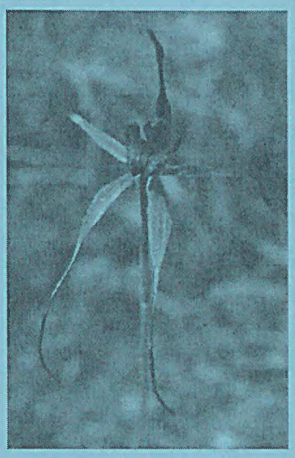
Cryptandra armara at Cryptandra Corner, Wellsford Forest, July 1970

The flowers in close-up (both photos by Peter Ellis)

Likewise in the Whipstick, I couldn't find the Slender Velvet Bush, *Lasiopetalum baueri*, at one small main locality; another smaller satellite locality exists, I haven't looked there. But I went again with Graham Hill to the main site, Graham was sure to find it as he knew the locality well, but no - well not a first. Even-tually we got our eyes in and located several small plants, once waist height, eaten to the ground by roos. What if DEPI put a burn through there? It needs fencing to give it a chance to regenerate.

Slender Velvet Bush, *Lasiopetalum baueri* Whipstick, see page 7 for the colour version (P.Ellis).

Then there's the Crimson Spider Orchid (Oct. '71) used to be called a maroon form of *Caladenia patersoni*, now *C. concolor*?, along the Sedgwick Race, Redvers Eddy showed us these back in the middle '60s, I think Glenise can now only find one. There was a time according to Tom Patullo when they grew all over the back slope of One Tree Hill (towards Tannery Lane).



Another old timer (about 20 years ago) took me out to the 'Springs' at Mandurang South (see page 7), the hillside to the left where he once knew they occurred in masses.

None

...continued at the next possible occasion...

Diary

All Club meetings are held at the Golden Square Senior Citizens Building, Old High St Golden Square, unless otherwise indicated.

Wednesday, December 10
6.00pm for a 6.30pm start
Please note the earlier meeting time for the December meeting. The club usually has a get-together with everyone bringing a dish and their own crockery/cutlery/drink and merriment.
Following the meal (by approximately 7.30 pm), we are lucky to have Rob Watkins talking about 'The Falklands & Antarctica'.
Rob's talk will include photographs taken during two of their recent adventures to that region of the globe.
Don't miss this! Even if you intend to go there yourself, you will benefit enormously from being able to see these amazing and remote places through the eyes of Rob & Cynthia via their excellent photographs.

Wednesday, February 11 7.30pm
First meeting of 2015. Speaker and topic - to be decided.

Annual Hall Spring Cleaning
On **Saturday December 13**, at 9am, you are welcome and encouraged to come along to the BFNC's annual spring clean of the hall and surroundings. The main tasks are removing cobwebs, dusting, cleaning windowsills and so on, and possibly some light maintenance and litter removal from the garden. You can spend as much or as little time as you like, and there is usually a cup of tea going as well.

Sho Takasuka 'A Great Australian'
Peter Ellis will be talking about Sho Takasuka on **Friday 6th of February at 2pm** at the lecturette theatre at BRIT (upstairs from the library). Sho was a dedicated member of the BFNC in the mid to late 1960s, and Senior Vice President in 1967, when our General Meeting was filmed by a Japanese TV crew. Sho was the first to discover duck orchids on the edge of the Goornong tip.

Family Nature Club
The Nature Club activities will continue in February 2015, so look out for announcements or check out their website.
Registration:
Bendigonatureclub@gmail.com or 5443-1326
http://bendigofamilynatureclub.blogspot.com/

Bendigo Native Plant Group meeting.
All interested people are welcome to come along. Meeting starts at 7:30pm on the third Tuesday of the month, Golden Square Senior Citizens Hall.
Next meeting: 16th of December.

Wildlife Rescue & Information Network Inc.
W.R.I.N. is an organisation dedicated to the care of orphaned, sick or injured native animals. It is fully endorsed by the Dept of Sustainability and Environment.
Please call our Emergency Number for Help for Fauna in Need. Phone: 0419 356433.
WRIN meetings held on the 1st Saturday of the month at 1pm the Golden Square Senior Citizens Hall

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Volunteers needed to study DFTD
Deadline: Wednesday, December 31, 2014
Enthusiastic and capable volunteers are required for a project studying social networks and the associated spread of devil facial tumour disease (DFTD) in the Arthur River area ofnorth-western Tasmania. Fieldwork will run from January until June/July 2015, and volunteers will be needed to cover the majority of this period.
If you would like a bit more information on the project, visit www.davidghamilton.com - there is also an online form for volunteering queries on the website. See more at: http://www.ecolsoc.org.au/opportunities/2014/tasmanian-devil-study---north-western-tasmania - sthash.nIPbM8d3.dpuf